

Induction of Pharmacists in Accident and Emergency Departments and Hospitals in Pakistan: A Case Study

Haider Ali¹, Muneeb Ullah¹, Sumbul Saeed², Shahid Ullah Khan², Wasim Ullah Khan³, Tayyaba Riaz¹, Sana Robab¹

¹Department of Pharmacy, Kohat University of Science and Technology, Kohat, Khyber Pakhtunkhwa, Pakistan

²College of Plant Sciences and Technology, National Key Laboratory of Crop Genetic Improvement, Huazhong, Agricultural University, Wuhan, China

³School of Materials Science and Engineering, Sun Yat-Sen (Zhong Shan) University

Guangzhou 510275, P. R. China

Email: munibdawar72@yahoo.com,

Abstract – In Pakistan, to approach the quality service in the Accident and Emergency (A&E) Department is a serious problem, and unfortunately, this is the place where pharmacists have a very little role as compared to other hospital wards. It is prima facie that a huge number of patients visited the A&E department which would lead to more consumption of medicines and hence increases more and more chances of drug-related problems. Induction of pharmacists into the A&E department will produce a good impact on the health of A&E visiting patients.

Keywords – Accident and Emergency, Pharmaceutical Services, Challenges, Recommendation

1. Introduction

A very little has been written on the role of pharmacists in emergency departments in the hospitals of Pakistan. The work which has been so far done by the doctors and physicians of leading hospitals like Aga Khan University Hospital and some others; is that they have neglected the role of a pharmacist in such critical care areas. The main purpose of the present mini article is to evaluate the problems which are occurring due to not hiring pharmacists in emergency care, challenges, and strategies and/or recommendations to make it possible for the induction of pharmacists in the A&E department in hospitals of Pakistan.

1.2. The infancy of pharmaceutical sciences in Pakistan (Infancy to maturity)

In Pakistan, 5 years Pharm-D program was initiated in 2003 [1], and currently, 78 Pharmacy schools are offering this program, but pharmacy is still considered in the infancy stages to provide public health services [2]. According to a survey, 63.93% of pharmacists believed that the curriculum of pharmacy being taught in Pakistan is not adequate to impart competence in pharmacy students to play their effective role in health care provision effectively [1].

However, recently governmental sectors have been taken into the urge for the placement of hospitals and clinical pharmacists in hospitals that have been clearly recognized and figured out officially the actual role of the pharmacist in Pakistan. And now it is the responsibility of pharmacists to show their abilities at all levels where they can work actively and efficiently.

1.3. Problems arise due to the lack of Pharmacists in the A&E Department

Doctors and nurses like to work traditionally and don't have a desire and motivation to change their attire or attitude, and young doctors don't find any emergency medicines that are an attractive specialty. So, as a result, due to the shortage of staff along with necessary equipment available in the current emergency care system at different healthcare levels in Pakistan is not only insufficient but also inadequate. These factors are likely to compromise provisions of quality emergency care [3-6]

Overcrowded emergency departments, frequent work-shifts, heavy workload, absence of competent medical personnel in the shifts, and failure of programmed medical staff are the other factors that may cause errors, respectively. Errors can increase the length of hospitalization, mortality, and costs, especially in large teaching hospitals. The following are the types of errors, depicted in the Graph. 1, which commonly arise due to the absence of a Pharmacist in the A&E department [5].

1.4. Work areas for Pharmacists in the A&E department

Drug the collection of historical data, ward rounds, risk management, source of advice, counseling at discharge, research, clinical decision units, adverse drug reactions reporting, patient counseling, identification of potential problems on discharge from hospital, liaison with community professionals, protocol development, attendance on medical grounds, provision of drug information, foreign/drug identification, stock control, staff/ student education, and therapeutic drug monitoring, respectively are various work areas in A&E where a pharmacist can play his role effectively [6, 7]

1.5. Challenges

Recently there is no clear concept of emergency department pharmacist in Pakistan and the most probable

challenges which might be faced by pharmacists while creating their place in emergency areas would be:

- Motivating government to introduce policies regarding the role of a pharmacist in an emergency
- Gaining hospital administration approval
- Obtaining the support of clinical staff working in the A&E department
- Expansion of workflow in the A&E department
- Determination of how best to define the role of the pharmacist in the A&E department [8]

1.6. Some Recommendations for Overcoming the Challenges

The main problem for pharmacists to make their place in the A&E department is convincing the government and then hospital administration or governing body. For this problem following recommendations are given as follows:

1. The most important thing is the economic concern of a country and then a hospital if the pharmacist writes down the formal budget proposal and presents it to governmental as well as hospital administration and tries to convince them that the induction of pharmacist in A&E will boost up the hospital economy by reducing medication errors; by preventing wrong drug consumption which usually occurs in A&E and the more important

thing is the shortening the patient stay in hospitals.

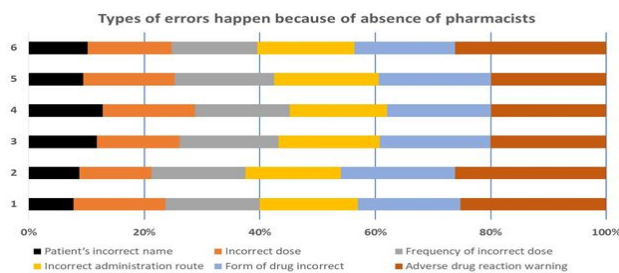
2. A pharmacist can give a formal presentation to the hospital administration while elaborating on the benefits of introducing a pharmacist in A&E.
3. A survey can be carried out while asking the health care personnel about the best role a pharmacist can play in the A&E department [9]
4. To insist on a more integrated coordination system between health care providers [3]
5. Training of pharmacist in clinical assessment programs like chest examination-stethoscope, x-rays, wheeze/crackles, croup, bronchiolitis, abdominal examination, UTI, constipation, colic, D&V Minor injuries training, ENT examination, detailed neurological examination, and dermatology [10]

1.7. Our Assessment of the A&E department

We interviewed nurses who were the in-charge of the drug store of the A&E department of various Hospitals. The data which we obtained from interviews is given below in table 1:

Table 1. Interview questions asked in the A&E departments of various hospitals in Pakistan

Sr. no	Questions	Answers
1	How many patients are brought in A& E per day?	Approximately 250 per day
2	How many doctors are performing their job here?	Approximately Four MOs (medical officers)
3	Do you think that Pharmacy must be under the control of pharmacists?	Yes, it is the job of the pharmacist to deal with the drugs
4	When a hospital pharmacist rounds the A&E department?	Usually after 2 days
5	Do you think that working in a drug store is extra work for you?	Yes, it is extra work on my shoulders.
6	What if this store would be operated by a pharmacist?	It would be very helpful for me and of course for all of the nurses in the hospital.



2. Conclusion

The pharmacist is a part of the health care team but unfortunately, the element is lacking in the accident and emergency department of hospitals in Pakistan. The A&E department is devoid of a proper pharmacy and the place where the drugs are stored is miserable and the inventory control is in the hand of nurses who admit that drug dealing is the job of pharmacists, and this work turns into an extra burden on their shoulders. When asked they said it would have been very helpful for them if the pharmacist had held such duty of dispensing and inventory control. Furthermore, the patients must have to wait for a longer duration of time when a doctor will come and takes their history to initiate therapy. It would be very helpful for the hospital, health care team members, and most importantly for patients if pharmacists are introduced in the A&E department.

References

- [1] S. A. Khan, M. Qayum, S.K. Sadozai, "Challenges in the shifting role of pharmacists in Pakistan", *Pharmaceutical Care and Research.*, 2016, 1(6).
- [2] K. Usmanghani, "The Dilemma of Pharmacy Practice and Research in Pakistan", *RADS Journal of Pharmacy and Pharmaceutical Sciences.*, 2017, 5(3).
- [3] J. A. Razzak, S. M. Baqir, U. R. Khan, D. Heller, J. Bhatti, A. A. Hyder, "Emergency and trauma care in Pakistan: a cross-sectional study of healthcare levels", *Emergency Medicine Journal.*, 2015, 32(3): p. 207-213.
- [4] R. P. S England, "Shaping pharmacy for the future: Improving Urgent and Emergency care through better use of pharmacists Shaping pharmacy for the future", 2014.
- [5] L. National Health Service, "A Spoonful of Sugar: Medicines Management in NHS Hospitals", 2001.
- [6] S.A. Welch, L.V. Graudins, "Scope of pharmacy services to the emergency department", *Journal of Pharmacy Practice and Research.*, 2007, 37(1), p. 27-29.
- [7] G. Foreshe, "A career as an A&E department pharmacist", *Hosp Pharmacist*, 2005, 12, p. 61-4.
- [8] M. D. S H Motamed, "Medication and Human Errors in Emergency Medicine"., 2017, February 8, 2017, [cited 2020 10 October 2020.]; Available from: <https://sites.kowsarpub.com/jjnpp/articles/13863.html>.
- [9] J. C. Witsil, R. Azamai, U. I. Murtaza, D. P. Hayas, R. J. Fairbanks, "Strategies for implementing emergency department pharmacy services", Results from the 2007 ASHP Patient Care Impact Program, *American Journal of Health-System Pharmacy.*, 2010, 67(5), p. 375-379.
- [10] NHS, H.E.E., "Pharmacists In Emergency Department", A commissioned Study by Health Education England, H.E.E. NHS., Editor.N. Kawasaki, "Parametric study of thermal and chemical nonequilibrium nozzle flow," M.S. thesis, Dept. Electron. Eng., Osaka Univ., Osaka, Japan, 1993.